



ADVANCED SPECIALIST DIPLOMA

in

SPECIMEN DISSECTION LOWER GASTROINTESTINAL PATHOLOGY

ISSUED TO:



The Royal College of Pathologists

Pathology: the science behind the cure

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Please note the following:

- 1. On a case-by-case basis, the quality assurance of the dissection of tissue specimens performed by biomedical scientists, who hold the Advanced Specialist Diploma in Specimen Dissection Lower Gastrointestinal Pathology remains the responsibility of the reporting consultant pathologist
- 2. This candidate guidance must be read in conjunction with the other supporting documents pertinent to this diploma:
 - Principles of Good Practice for Biomedical Scientist involvement in Histopathological Dissection
 - Guidance to Candidates and Trainers for the Institute Advanced Specialist Diploma in Specimen Dissection Lower Gastrointestinal Pathology
 - Royal College of Pathologists (RCPath) 2016 guidelines
- 3. For the purposes of this guidance, the training logbook and diploma, the lower gastrointestinal tract is defined as:
 - the small bowel below the Ampulla of Vater, the appendix, the colon, the rectum and the anus

INTRODUCTION

The Institute's Advanced Specialist Diploma in Specimen Dissection - Lower Gastrointestinal Pathology provides evidence of the attainment of both the necessary scientific and clinical knowledge underpinning the practice of lower GI pathology specimen dissection, with the practical competence required to accurately dissect all lower GI specimens whether benign or malignant. Possession of this diploma will enable you to apply for an appropriate post.

AIMS

- 1. To develop the professional knowledge and skills of a candidate beyond that of to a high level of professional practice
- 2. To enable successful candidates to undertake a role that involves the description, dissection and block sampling of all lower GI pathology specimens
- 3. To enable successful candidates to offer expert professional advice on lower gastrointestinal pathology specimen dissection
- 4. To enable successful candidates to participate in the training of biomedical scientists and specialist trainee medical staff in lower GI pathology specimen dissection

LEARNING OUTCOMES

Individuals awarded the Advanced Specialist Diploma in Specimen Dissection - Lower Gastrointestinal Pathology will be able to:

- 1. Demonstrate expert professional skills and advanced knowledge beyond those required of biomedical scientists in histopathology working at the level of the Diploma in Expert Practice in Histological Dissection
- 2. Demonstrate full understanding of the physiological and pathological processes associated with the lower small bowel, appendix, colon, rectum and anus
- 3. Accurately describe the macroscopic appearances of lower GI pathology specimens using appropriate terminology
- 4. Know and understand the role of GT scanning and other imaging methods in relation to the assessment of lower GI disease
- 5. Able to relate clinical/radiological/pathological findings to complex lower GI pathology specimen dissection

- 6. Use highly specialised practical skills to dissect all lower GI specimens to enable accurate histological reporting
- 7. Produce high quality images of lower GI pathology specimens to enable correlation between the gross specimen, radiological findings and the final diagnosis
- 8. Demonstrate the ability to operate autonomously within limits of their own competence, seeking advice from a consultant pathologist when needed
- 9. Engage in critical dialogue and work collaboratively with other healthcare professionals to provide a high quality service
- 10. Continue to develop their own area of practice by keeping their professional knowledge and skills up to date

CONSULTANT PATHOLOGIST SUPERVISOR

A biomedical scientist considering undertaking training for the Advanced Specialist Diploma in Lower Gastrointestinal Pathology Dissection requires a named consultant pathologist supervisor. This is essential in ensuring that the biomedical scientist in training has the necessary support and exposure to material and training to enable the acquisition of these advanced skills and knowledge, and ultimately, to apply them in advanced professional practice. The named consultant pathologist supervisor must be registered on the specialist register with the GMC, currently reporting lower GI pathology, meet the minimum RCPath CPD requirements must participate in a general EQA scheme and/or the National GI EQA scheme. The consultant pathologist supervisor must:

- 1. Guide and direct the training process
- 2. Regularly review progress during the training period, which must include direct observation of practical skills, evidence of case reviews
- Set agreed learning plans with candidate
- 4. Be able to arrange for the biomedical scientist to obtain training in all the required areas
- 5. Inspect the portfolio prior to submission to the Institute to ensure it meets the requirements specified in the guidance to candidates
- 6. Sign the declaration in the logbook to confirm that the candidate has undergone training, and in his/her opinion is competent and ready to sit the examination

The pathologist supervisor and the biomedical scientist in training should comply with relevant RCPath and IBMS guidelines and standards.

DELIVERY OF TRAINING

Training must be delivered in accordance with this IBMS/RCPath logbook for the Advanced Specialist Diploma in Histological Dissection – Lower Gastrointestinal Pathology. Completion of training is evidenced by submission of the signed logbook and compilation of a portfolio that contains evidence of regular assessments of competence in dissecting appropriate lower GI pathology specimens by a named consultant pathologist supervisor. If the repertoire of the training laboratory is not comprehensive enough to allow exposure to the widest spectrum of lower gastrointestinal pathology, it is considered good practice for biomedical scientists to visit other laboratories to share expertise and to learn different techniques.

The sub-speciality training component of this training programme is best served by participation in current specialist breast pathology and related activities, in close association with a consultant specialising in this area. The overall aim of the training programme is to develop advanced knowledge, attitudes and dissection skills in lower gastrointestinal pathology. Training of biomedical scientists in advanced lower gastrointestinal pathology dissection must not detract from the training of specialist trainee medical staff in these areas.

ONGOING ASSESSMENT OF COMPETENCE

In-house assessments of competence must be an interactive continuous process between the supervising pathologist and the biomedical scientist. Work-based assessments (WBAs) must include a minimum of six direct observation of practical skills (DOPs), three case-based discussions (CBDs) and three evaluation of clinical events (ECEs) and one multi-source feedback (MSF) which must be undertaken during the training period. Regular reviews of progress are essential for the setting of agreed learning plans and as part of an ongoing personal development plan.

COMPLETION OF TRAINING

Once the named consultant pathologist supervisor and the laboratory manager are satisfied that the training is complete, the candidate may contact the Institute for an examination application form.

Progression to the examination for the Advanced Specialist Diploma in Specimen Dissection – Lower GI Pathology is dependent upon the satisfactory assessment of the portfolio.

Success in the written and viva voce examinations will be recognised by the awarding of the Advanced Specialist Diploma in Specimen Dissection – Lower GI Pathology

TRAINING PROGRAMME

The training programme for biomedical scientists wishing to obtain the Advanced Specialist Diploma in Lower GI Pathology Specimen Dissection is guided by recommendations made by the following reports, documents and guidelines:

- the final report from the Royal College of Pathologists and Institute of Biomedical Science Working Group on the implementation of the extended role of the biomedical scientists in specimen description, dissection and sampling (2004)
- Modernising Pathology Services. DH (2004)
- Carey F, Newbold M, Quirke P, Shepherd N, Warren B, Williams G. Reporting Lesions in the NHS Bowel Cancer Screening Programme: NHS Bowel Cancer Screening Programme Document 1. Sheffield: NHS Cancer Screening Programmes; 2007
- RCPath Tissue Pathways: Gastrointestinal and Pancreaticobiliary Pathology: (January 2016) and Colorectum: (December 2017) https://www.rcpath.org/profession/publications/cancer-datasets.html
- Sanders DSA, Smith AP, Carr RA, Roberts SE, Gurusamy S, Simmons EJV. Enhanced biomedical scientists cut-up role in colonic cancer reporting: J Clin Pathol doi:10.1136/jcp.2009.069039



A CORE GENERIC KNOWLEDGE AND SKILLS

Generic knowledge and dissection skills must be evidenced before attempting the Advanced Specialist Diploma in Lower Gastrointestinal Pathology Specimen Dissection.

Subject	Knowledge	Performance Criteria
Introduction	Has a sound and thorough knowledge of the nature of the specimens received within the department	Demonstrates the ability to solve problems regarding queries over specimens from a clinician, at the cut-up bench.
	Possesses an appropriate knowledge of Lower GI pathology, sufficient to dissect such specimens.	Understands that the clinicopathological correlation is absolutely crucial in pathology in general and the impact that this has on patient management.
Clinical	Has a thorough knowledge and understanding of the definition and	Participates in all elements of clinical governance, maintains patient
Governance	organisational framework of clinical governance.	confidentiality, learns from complaints and errors and shares best practice
Training	Understands the training methods used to impart cut-up skills and appreciates the sequence of observation, direct supervision and indirect supervision	Applies the various training methods to the practical situation and demonstrates competence in sample selection.
Continuing	Understands the need for Continuing Professional Development	Actively participates in learning opportunities including sessions spent in
Professional		clinics, theatre, departmental multidisciplinary and breast pathology teaching sessions and meetings.
Development		teaching sessions and meetings.
		Maintains a personal development plan to set learning goals.
		Has an insight into own knowledge and skills limitations.
		Is able to learn from colleagues and accepts that appraisal and feedback
		are positive steps to setting learning targets for further
Ctondoud	Understands that all aspects of laboratory work must be covered by	improvement/personal development. Can use departmental SOPs competently and has the ability to write,
Standard	individual, signed, indexed and dated SOPs.	modify or add to them.
Operating Procedures	marriada, signed, marriada dated 301 s.	mount of dad to them.
Trocedures	Knows that before commencing training it is mandatory that SOPs	
	are in place to describe the departmental protocol for the dissection	
	of tissues.	

Risk	Has a good knowledge of risk management as applied to the	Has a positive attitude to risk management by recognising that risk is a
	laboratory setting and the utility of the risk management cycle which incorporates incident reporting	part of laboratory practice.
	which incorporates incident reporting	Learns from mistakes and applies changes in order to minimise the risk of
	Has specific knowledge of the following:	recurrence.
	Safety responsibilities of the employee as defined in each	
	individual's job description.	Follows the departmental/trust risk and safety procedures.
	The universal precautions for handling specimens.	
	Waste/human tissue disposal/retained organ regulations.	
	The procedures for dealing with high risk specimens.	
	Specimen handling procedures for dissection.	
	Procedure for mislabelled specimens.	
	SOP risk assessment compliance	
	The protocol for referring any specimen or specimen type outside	
A 111	their competence or remit to the consultant pathologist	Considerate describerate and continues and c
Audit	Has a thorough knowledge of the audit cycle and internal and external quality assurance procedures as applied to laboratory	Can independently initiate an audit project.
	practice procedures as applied to lateratory	Appreciates that audit ensures that best practice is being carried out
Data security	Has knowledge of the Caldicoth report and the Data Protection Act	Understands the need for patient confidentiality and applies this
and	(2018) and how these are applied to laboratory practice.	knowledge to the laboratory situation.
confidentiality		

B CORE SUB-SPECIALITY COLORECTAL PATHOLOGY KNOWLEDGE

The following are areas which the biomedical scientist in training must become familiar with:

GENERAL PRINCIPLES

COMPETENCE	DATE COMPLETED	REFERENCE TO PORTFOLIO
Has a knowledge and understanding of:		
The anatomy, function and physiology of the lower GI tract (as defined previously)	\mathcal{L}	
The role of endoscopy, biopsy and cytology in the diagnosis of colorectal pathology		
The recognition, naming, anatomical relationships and orientation of all lower GI surgical excision specimens		
How to dissect common specimen types within the colorectal system module competently and safely		
The role of imaging in the diagnosis and staging of colorectal pathology and their correlation with pathology results in the context of lower GI MDT meetings		

PRINCIPLES OF COLORECTAL PATHOLOGY SPECIMEN DISSECTION

COMPETENCE	DATE COMPLETED	REFERENCE TO PORTFOLIO
Specimens and Pathology		
Has the knowledge skills and competence with the following specimens and		
associated pathology:		•
GENERAL		
Local Mucosal Resections		
Endoscopic (EMR), Transanal (TART) and TAMIS stalked polyne or sessile lesions		
stalked polyps or sessile lesions stalked polyps or sessile lesions stalked polyps or sessile lesions		
orientation (attached marker suture, submitted pinned out)		
• fixation		
identification and painting of the stalk or base		
demonstration of the lesion and its relationship to the stalk, deep and		
lateral mucosal resection margins		
Radical Resections		
 Identification of the constituent anatomical parts 		
 resection margins (proximal and distal longitudinal, non- 		
peritonealised/circumferential radial, anastomotic rings)		
mesenteric structure or adventitia and constituent lymph nodes		
(including apical/limit node) and vessels		
• peritoneum		

PRINCIPLES OF COLORECTAL PATHOLOGY SPECIMEN DISSECTION continued

COMPETENCE	DATE COMPLETED	REFERENCE TO PORTFOLIO
 Procedure open partially or completely according to local dissection protocols anatomical and lesion measurements. note obstruction, perforation, fistula, abscess, fat wrapping, adhesions, adherent or involved structures fixation inking of the non-peritonealised/circumferential radial resection margin as appropriate 		
 take sufficient blocks to demonstrate the lesion(s) and the: distribution e.g. focal/segmental/diffuse (non-neoplastic), or, solitary/multifocal (neoplasia) relationship to anatomical structures (mucous membrane, wall, mesentery, peritoneum, lymph nodes, vessels, other organs) for malignancies, the extent of the spread through the bowel wall d. relationship to surgical margins (longitudinal and circumferential) 		
 block longitudinally (non-neoplastic) or transversely (neoplasia) according to specimen type, and, proximity of the lesion (s) to the nearest longitudinal resection margin the cut slices recording the features identified 		
 sample representative (non-neoplastic) or all (neoplasia) lymph nodes, and identify an apical node where appropriate 		
 sample mesenteric vessels for: tumour involvement thromboemboli others e.g. vasculitis, amyloid, anatomical anomalies 		

INDIVIDUAL SPECIMEN TYPES

COMPETENCE	DATE COMPLETED	REFERENCE TO PORTFOLIO
Has the knowledge and professional skills to dissect the following lower GI specimens		
SMALL INTESTINE		
Resections are for • ischaemia to include: volvulus, adhesions, incarcerated hernia and vasculopathies (see IBMS Diploma of Expert Practice in Histological Dissection)		
 small bowel obstructions to include: tumours and inflammatory bowel disease 		
right hemicolectomy for distal small bowel lesions		
COLORECTUM		
Resections are for • volvulus, ischaemia, polyps and diverticular disease (see IBMS Diploma of Expert Practice in Histological Dissection)		
Resections are also done for specific lesions including		
 pneumatosis coli, colonic angiodysplasia, inflammatory (e.g. ulterative colitis, Crohn's disease, pseudomembranous colitis) and neoplastic (carcinomas, lymphomas, neuroendocrine tumour) conditions. Resection depends on the site, distribution of the lesion (single/multifocal, segmental/diffuse), involvement of other structures, stage of disease and, curative or palliative intent. The latter and inflammatory conditions require only limited as opposed to radical mesenteric resection 		

INDIVIDUAL SPECIMEN TYPES continued

COMPETENCE	DATE COMPLETED	REFERENCE TO PORTFOLIO
Procedures		
ileocaecectomy		
segmental colectomy		
right hemicolectomy		
extended right hemicolectomy		
transverse colectomy		
left hemicolectomy	X	
sigmoid colectomy		
subtotal colectomy		
total colectomy		
total proctocolectomy		
proctectomy (including excision of rectal stump)		
 anterior resection with total mesorectal excision (TME), or high anterior resection 		
abdominoperineal resection		

INDIVIDUAL SPECIMEN TYPES continued

COMPETENCE	DATE COMPLETED	REFERENCE TO PORTFOLIO
APPENDIX Resections are for inflammatory or neoplastic conditions. ANUS		
Resections for inflammatory conditions • can be local including haemorrhoids, skin tag, prolapsing cloacogenic polyp (Solitary Rectal Ulcer Syndrome), the roof of a fissure or anorectal abscess, or excision of a fistula		
Resections for neoplastic disease can be local or radical local excision: small lesions (< 2 cm) present at the anal verge with a 2 cm surrounding rim of normal skin		
 abdominoperineal resection: larger tumours or extensive tumours of the anal canal that are unresponsive to radio-/chemotherapy. Also for low rectal adenocarcinoma involving upper anal canal, and rare anal malignancies e.g. malignant melanoma, leiomyosarcoma 	5	
 Pelvic exenteration in general for locally advanced or recurrent pelvic malignancy in the absence of extra pelvic metastases. Anal, rectal, cervical carcinomas and sometimes aggressive bladder, uterine, vaginal, vulval and soft tissue malignancies 		
Pelvic exenteration can include • anterior: bladder, lower ureters, internal reproductive organs, draining lymph nodes and pelvic peritoneum		
 posterior: anorectum, distal colon, internal reproductive organs, draining lymph nodes and pelvic peritoneum 		
total: anterior and posterior		

REFERENCES

RCPath Tissue Pathways: Gastrointestinal and Pancreaticobiliary Pathology: (January 2016) and Colorectum: (December 2017) https://www.rcpath.org/profession/publications/cancer-datasets.html

INDICATIVE READING LIST

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Survarna K, Layton C, Bancroft J. Bancroft's Theory and Practice of Histological Techniques. 8th ed. Elsevier; 2018.

DECLARATIONS

I declare that I have satisfactorily complete Diploma in Lower Gastrointestinal Patholog			ranced Specialist
Signed			
Name			
Date			
I declare thathas s Advanced Specialist Diploma in Lower Gast Signed (consultant pathologist supervisor)	trointestinal Pathology of the In		
Name			
Date			